A1

(c) repeating said emission measurements at a second temperature;

wherein the emission of said FRET acceptors at different temperatures provides an indication of the alleles present at said ~~multiple loci~~ three or more loci.

2 1
~~13~~. The method of Claim ~~12~~, wherein the FRET acceptor of each of the second members of each of a first, a second and a third probe pair has an emission spectrum which is different from the emission spectrum of the others.

3 1 2
~~14~~. The method of Claim ~~12~~ or ~~13~~, wherein said nucleic acid sample is the product of one or more reactions selected from the group consisting of PCR, 3SR, SDA and RCA.

A2

4 1 2
~~15~~. (Amended) The method of Claim ~~12~~ or ~~13~~, wherein at least one probe comprises two FRET acceptors, two FRET donors or a FRET acceptor and a FRET donor, and said probe is a member of two different probe pairs.

16.

6 5
~~17~~. The method of Claim ~~16~~, wherein said range of temperatures is from at least 20° C to at most 95° C.

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~~18~~. (Amended) The method of Claim ~~16~~, wherein said emission measurements are repeated at least every 0.1 to 10 seconds.

8 7
~~19~~. The method of Claim ~~18~~, wherein the temperature is varied at least 0.01 to 1°C per second.

9 1 2
~~20~~. The method of Claim ~~12~~ or ~~13~~, wherein said emission measurements at a particular temperature are simultaneous.

10 1 2
~~21~~. The method of Claim ~~12~~ or ~~13~~, wherein at least one of said FRET acceptors is selected from the group consisting of LC Red 640, Cy 5, Cy 5.5 and LC Red 705.

A

11 1 2
~~22~~. The method of Claim ~~12~~ or ~~13~~ wherein said emission measurements are corrected for spectral overlap between or among the different fluorophores.